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CASIO

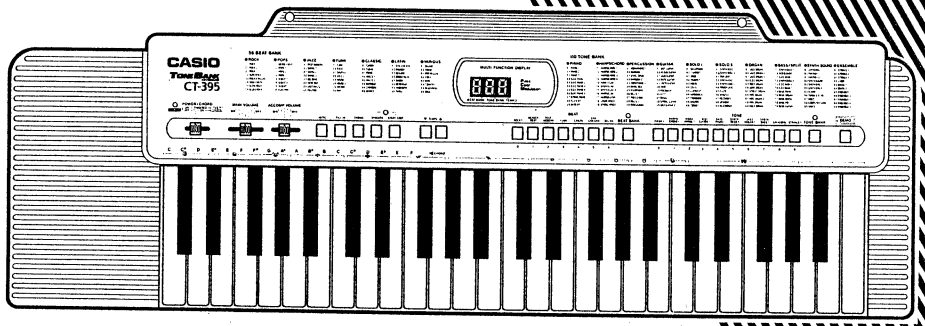
TONE BANK KEYBOARDS

CT-395

ELECTRONIC MUSICAL INSTRUMENT
INSTRUMENTO MUSICAL ELECTRONICO

OPERATION MANUAL 2

MANUAL DE OPERACION 24



(英) (西)

マニュアル室サンプル
マニュアル 1990. 9. 22 並田

TONE BANK KEYBOARDS CT-395

ELECTRONIC MUSICAL INSTRUMENT

CT-395 Features

- **110-SOUND TONE BANK**
  A high-fidelity 12-bit PCM sound source produces an outstanding selection of 110 TONE BANK Sounds. Sounds are broken down into 10 categories for quick and easy selection. See page 9, "Preset Tones" for details.
- **56-PATTERN BEAT BANK**
  Snappy PCM auto-rhythms energize any keyboard performance. This amazing selection of patterns is broken down into 7 categories for simple selection. See page 12, "Auto-Rhythms" for details.
- **One-Touch CASIO CHORD Accompaniment**
  Now even beginners can enjoy playing full, professional-level chords, by playing with one finger. More advanced players can switch over to the FINGERED mode for normal chord play. See page 16 for full details.
- **MUSICAL CONTROLLERS**
  MUSICAL CONTROLLERS give you full control over the introductions, fill-ins, and endings of rhythm and accompaniment patterns. Arrange your own patterns for a professional-sounding rhythm and accompaniment. See page 18, "Using the MUSICAL CONTROLLER buttons" for details.
- **MULTI FUNCTION DISPLAY**
  3-digit LED will display your TONE BANK sound selection, BEAT BANK rhythm selection or TEMPO setting (beat per minute) for easy selection and confirmation during performance.

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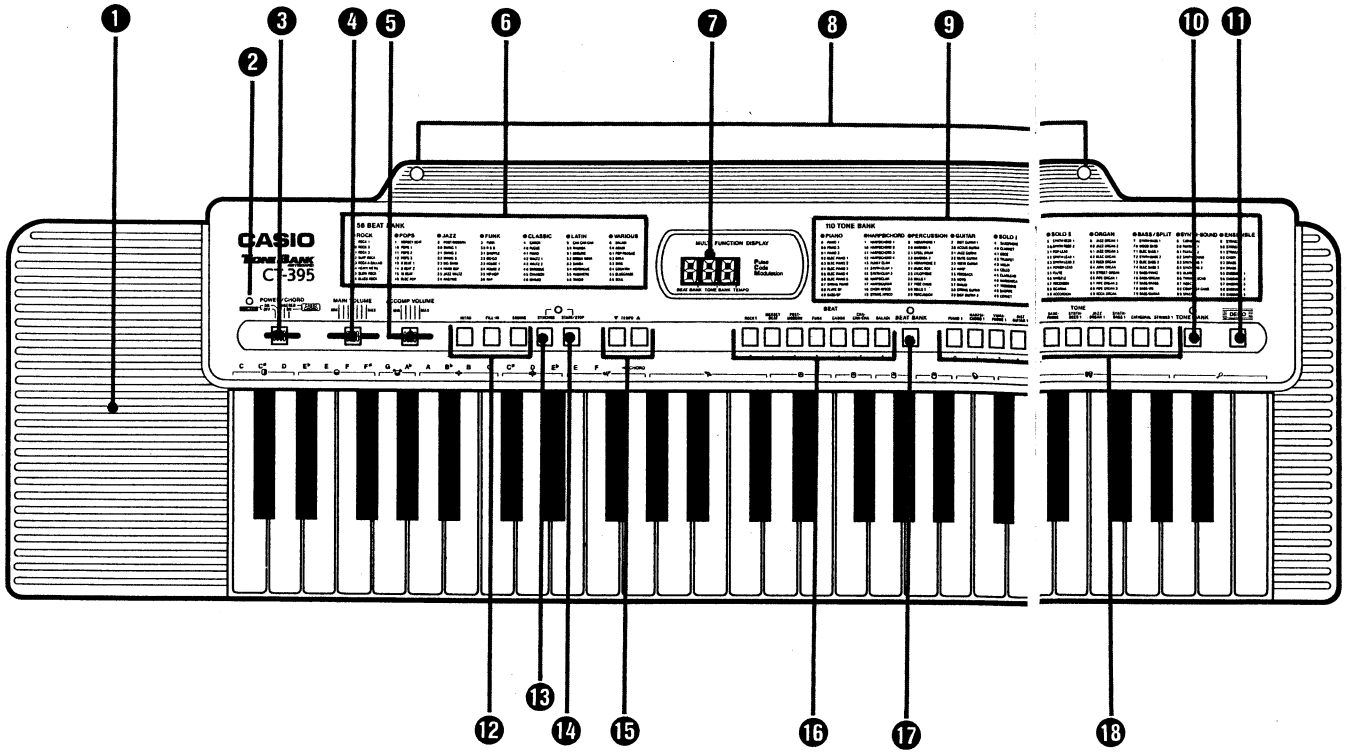
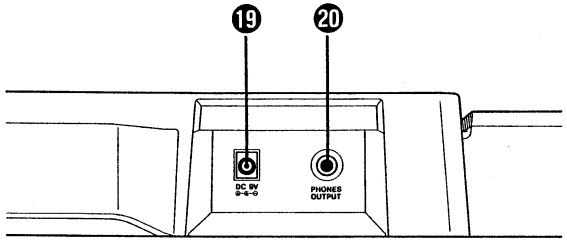
Precaution
The batteries that come with the unit are test batteries. If battery power drops below a certain level, the quality of the tone produced deteriorates, a totally different tone may sound, or the demo tune or auto rhythm may become abnormal. Should any of these symptoms occur, replace batteries as soon as possible.

1 General Guide



❶ Built-in speaker
❷ Power indicator lamp
❸ POWER/CHORD selector
❹ MAIN VOLUME slider
❺ ACCOMP VOLUME slider
❻ 56 BEAT BANK list
❼ 3-digit display (MULTI FUNCTION DISPLAY)
❽ Holes for score stand
❾ 110 TONE BANK list
❿ TONE BANK button
⓫ DEMO button
⓬ MUSICAL CONTROLLER buttons (INTRO, FILL-IN, ENDING button)
⓭ SYNCHRO button
⓮ START/STOP button
⓯ TEMPO control buttons
⓰ BEAT selectors
⓱ BEAT BANK button
⓲ TONE selectors

<Rear panel>



⓳ AC adaptor jack
⓴ Output/Headphone jack

Demonstration Tune

This unit features a preset demonstration tune which has been carefully programmed to showcase all the features and functions of this unit. Simply press the DEMO button ⓫, and listen to the CT-395 play.

DEMO

- *The demonstration tune is played in an endless loop. Press the DEMO button again to stop the tune.*
- *The keyboard is inoperable while the demonstration tune is playing.*

2 Power Supply

This unit operates on both AC and DC power.

■ DC Power

◆ Dry batteries

This unit can be powered by six AA size (SUM-3/R6P) manganese or (AM-3/LR6) alkaline dry cell batteries. Weakened batteries will result in lower volume or poor tonal quality. The power indicator lamp will gradually lose its brightness when battery power weakens. At this time, change batteries or shift to one of the alternate power sources mentioned below.

◆ To replace batteries

① Open the battery compartment cover on the bottom of the unit and take out the used batteries.
② Load new batteries taking care that the plus (+) and minus (−) poles are facing in the correct directions.

- *Refer to the specifications for standard battery life.*

PRECAUTIONS

Incorrectly using batteries can cause them to leak or burst, and may damage your product. Note the following precautions:

- Be sure that the plus (+) and minus (−) poles are facing in the correct directions.
- Do not mix battery types.
- Do not mix new batteries with old ones.
- Never leave dead batteries in the battery compartment.
- Remove batteries when not using the product for extended periods.
- The batteries supplied with the unit are not rechargeable.
- Do not expose batteries to direct heat, let them become shorted or try to take them apart.

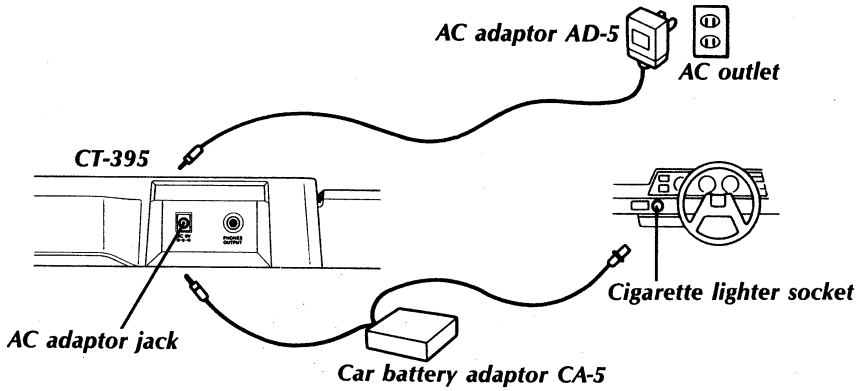
(If a battery leaks, clean out the battery compartment of the product immediately, taking care to avoid letting the battery fluid come into direct contact with your skin.)

◆ Car battery

With the car battery adaptor (CA-5, optional), DC power is supplied from a car battery through the cigarette lighter socket.

■ AC Power

An AC adaptor (AD-5, optional) is required when using household current. Use only a genuine CASIO adaptor with the same voltage rating (100, 117, 220 or 240) as the power supply in your area to prevent damage to internal components. Plug the AC adaptor into the AC outlet and the cord into the unit. This will automatically cut off the battery power supply.



CAUTION

- Use only genuine CASIO adaptors to avoid risk of damage.
- The adaptor may become warm when left connected to an AC outlet. This is normal, but the adaptor should be unplugged when not in use.

■ Auto power off function

Power is automatically cut off approximately 6 minutes after the last operation of the unit. Power supply can be restored by switching power OFF and then ON again.

3 General Operations

• Refer to the general guide on page 4–5 for exact locations of keyboard controls and connections.

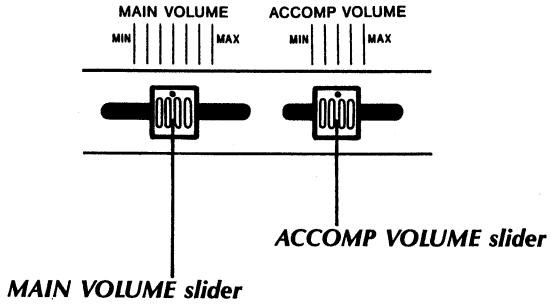
■ Getting started

① Set the POWER/CHORD selector to ON (The indicator above this selector lights).
② Adjust the volume level using the MAIN VOLUME slider.
③ Select one of the 110 preset tones (see "Preset Tones", page 9).
④ Now, start playing.

■ VOLUME sliders

MAIN VOLUME slider:
Adjusts the overall volume of the unit.

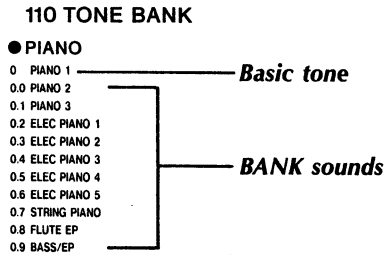
ACCOMP VOLUME slider:
Adjusts the volume of the rhythm and the accompaniment pattern.



4 Preset Tones (110-SOUND TONE BANK)

• Refer to the general guide on page 4–5 for exact locations of keyboard controls and connections.

This unit features a total of 110 preset tones including 10 ***basic tones*** and 100 ***BANK sounds***.
Look at the 110 SOUND TONE BANK list on the front panel. As you'll notice, the preset tones are divided into 10 groups such as PIANO group, HARPSICHORD group, etc. The basic tones are the representative ones, which appear at the top of the list of each group. You can select the basic tones directly using a TONE selectors. The BANK sounds are variations of each group, which can be selected using the TONE selectors after pressing the TONE BANK button.



■ Selecting a basic tone (tone 0 through 9)

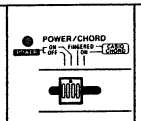
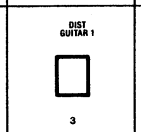
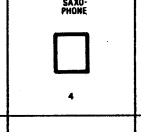
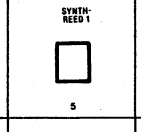
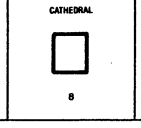
Note that you do not press the TONE BANK button (the indicator above the TONE BANK button is not lit) when selecting a basic tone.
Press one of the TONE selectors to choose a preset tone.

• PIANO 1 (tone 0) is automatically selected when the power of the unit is switched ON.

■ Selecting a BANK sound

Look at the 110 SOUND TONE BANK list again. The tones which have 2-digit numbers are BANK sounds. To select a BANK sound, first select the basic tone of the group that contains the BANK sound you want, and then press the TONE BANK button (the indicator above this button lights). Now, you can select the BANK sounds of the group you've selected by pressing a TONE selector.

<Example>
To select OCARINA (tone number 5.8) after selecting HARP (tone number 3.4)

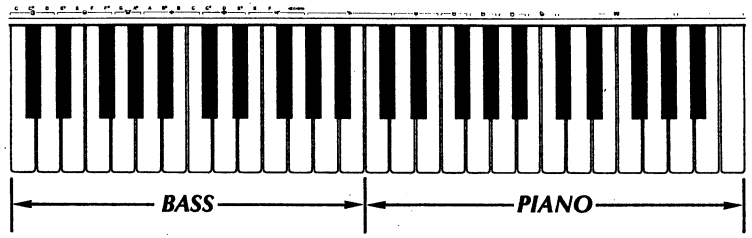
① Set the POWER/CHORD selector to ON. PIANO 1 tone (tone 0) is automatically selected.		
② Press TONE selector 3.		
③ Press the TONE BANK button. The indicator above this button lights.		
④ Press TONE selector 4. HARP is selected now.		
⑤ Next, select OCARINA. To do this, press the TONE BANK button. The indicator above this button goes out.		
⑥ Press TONE selector 5.		
⑦ Press the TONE BANK button again. The indicator above this button lights.		
⑧ Press TONE selector 8. Now OCARINA is selected.		

■ Keyboard split tones

Some of the preset tones split the keyboard and assign two or more sounds. With such a preset tone, the sound produced depends on what position of the keyboard you play. For example, BASS/PIANO (tone 7.5) puts BASS on the left and PIANO on the right of the keyboard.

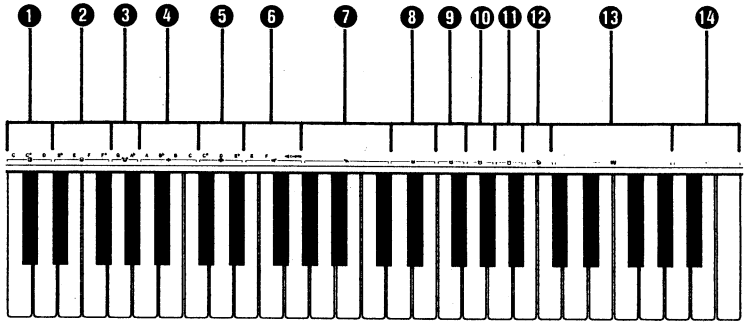
<Example>

BASS/PIANO (No. 7.5)



PERCUSSION (No. 2.9)

- *PERCUSSION (tone 2.9) assigns 14 percussion sounds to the keyboard as illustrated below. The sounds assigned to each key are indicated above the keyboard.*

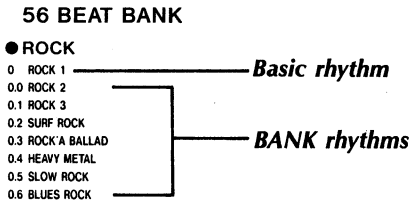


❶ bass drum
❷ snare drum
❸ gated snare drum
❹ closed hi-hat
❺ open hi-hat
❻ crash cymbal
❼ ride symbal
❽ hi tom
❾ mid tom
❿ low tom
⓫ floor tom
⓬ cow bell
⓭ timbales
⓮ maracas

5 Auto-rhythms (56 BEAT BANK)

- *Refer to the general guide on page 4-5 for exact locations of keyboard controls and connections.*

This unit features a total of 56 rhythm patterns including 7 ***basic rhythms*** and 49 ***BANK rhythms.***
Look at the 56 BEAT BANK list on the front panel. As with preset tones, the rhythm patterns are divided into groups. You can directly select basic rhythms using the BEAT selectors. The BANK rhythms are variations of each basic rhythm. They can be selected using the BEAT selectors after pressing the BEAT BANK button.



■ Selecting a basic rhythm (rhythm number 0 through 6)

Simply press one of the BEAT selectors.
Note that you do not press the BEAT BANK button (the indicator above the BEAT BANK button is not lit) when selecting a basic rhythm.

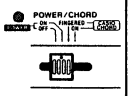
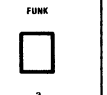
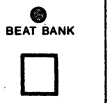
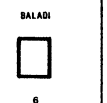
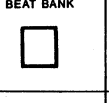
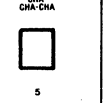
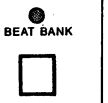
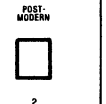
- *ROCK 1 (rhythm 0) is automatically selected when the power of the unit is switched ON.*
- *You can start or stop play of an auto-rhythm using the START/STOP button. See page 14, "Playing an auto-rhythm".*

■ Selecting a BANK rhythm

Look at the 56 BEAT BANK list again. The rhythms which have 2-digit numbers are BANK rhythms. To select a BANK rhythm, first select the basic rhythm of the group that contains the BANK rhythm you want, and then press the BEAT BANK button (the indicator above the BEAT BANK button lights). Now, you can use the BEAT selector to select the BANK rhythms in the group you've selected.

- *You can start or stop play of an auto-rhythm using the START/STOP button. See page 14, "Playing an auto-rhythm".*

<Example>
To select BOSSA NOVA (rhythm 5.2) after selecting RAP (rhythm 3.6)

① Set the POWER/CHORD selector to ON. ROCK 1 (rhythm 0) is automatically selected.		
② Press BEAT selector 3.		
③ Press the BEAT BANK button. The indicator above this button lights.		
④ Press BEAT selector 6. RAP is selected now.		
⑤ Next, select BOSSA NOVA. To do this, press the BEAT BANK button. The indicator above this button goes out.		
⑥ Press BEAT selector 5.		
⑦ Press the BEAT BANK button again. The indicator above this button lights.		
⑧ Press BEAT selector 2. Now BOSSA NOVA is selected.		

■ Playing an auto-rhythm

① After selecting an auto-rhythm, press the START/STOP button to start its play.
② You can adjust the volume of the rhythm by using the ACCOMP volume slider.
③ Adjust the tempo using the TEMPO control buttons. Each press of [▲] speeds up the tempo, while pressing [▼] slows it down. The 3-digit display shows the tempo of the rhythm.

- *The tempo of the auto-rhythm can be adjusted between 40 and 256 beats per minute (♩ =40~256).*
- *132 beats per minute (♩ =132) is automatically set when the power is switched ON, or both tempo keys are pressed at the same time.*

④ Press the START/STOP button again to stop auto-rhythm play.

- *You can use the MUSICAL CONTROLLER buttons to start an auto-rhythm with intro pattern, to insert fill-ins to the rhythm, etc. Please refer to page 18, "Using MUSICAL CONTROLLER buttons" for details.*

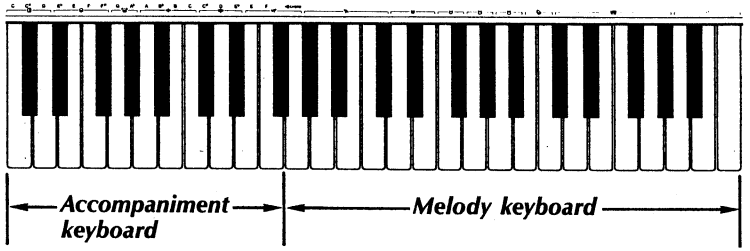
6 Auto-accompaniment

- *Refer to the general guide on page 4–5 for exact locations of keyboard controls and connections.*

This unit features 56 accompaniment patterns that let you add full accompaniments to your performances automatically. Each accompaniment pattern consists of 4 parts, including Rhythm, Bass, Chord 1 and Chord 2 adding more depth to your music. Chords can be played normally (FINGERED), or you can select one-finger chord play (CASIO CHORD ON). In addition, the MUSICAL CONTROLLER buttons give you full control over the accompaniment patterns, including introductions, fill-ins, and endings.

■ Accompaniment keyboard

If the POWER/CHORD selector is set to FINGERED or ON, keys of the lower 1.5 octave of the keyboard become an accompaniment keyboard, which can be used for auto-accompaniment.

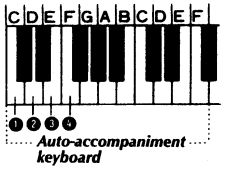


■ Playing an accompaniment using CASIO CHORD (One-finger method)

① Set the POWER/CHORD selector to the ON position.
② Select one of the auto-rhythms (refer to "5. Auto-rhythms" on page 12).
③ Start the auto-rhythm by pressing the START/STOP button.
④ Play on the accompaniment keyboard keys according to the CASIO CHORD system (refer to "CASIO CHORD system" on page 16). The moment you press an accompaniment keyboard key, the auto-accompaniment pattern starts to play in the rhythm track.
⑤ Press the START/STOP button again to stop auto-accompaniment play.

Casio Chord system (One-finger method)

- The Casio Chord system has been developed so you can play the four main types of chords more easily.
- Pressing any of the accompaniment keyboard keys produces the major chord that corresponds to that note.
- Simultaneously pressing any key to the right of the major chord key (two keys at the same time) produces the corresponding minor chord.
- Simultaneously pressing any two keys to the right of the major chord key (three keys at the same time) produces the corresponding 7th chord.
- Simultaneously pressing any three keys to the right of the major chord key (four keys at the same time) produces the corresponding minor 7th chord.



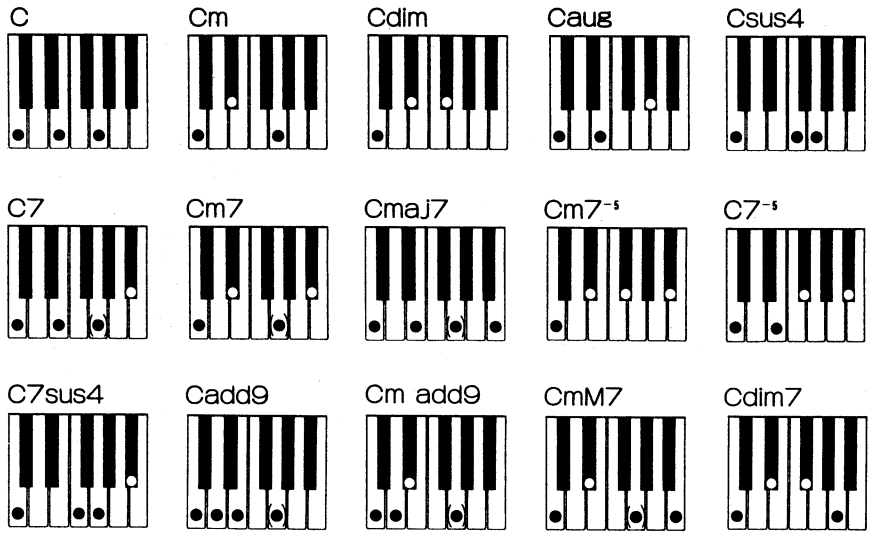
<Examples>
C (C major chord)—Press ❶.
Cm (C minor chord)—Press ❶, ❷ together.
C_7 (C seventh chord)—Press ❶, ❷, ❸ together.
C_{m7} (C minor seventh chord)—Press ❶, ❷, ❸, ❹ together.

- *Not only ❷, ❸, and ❹, but any black or white keys can be used as long as they are to the right of ❶.*

■ Playing an accompaniment using Standard chord fingering (FINGERED)

① Set the POWER/CHORD selector to the FINGERED position.
② Select one of the auto-rhythms (refer to "5. Auto-rhythms" on page 12).
③ Start the auto-rhythm by pressing the START/STOP button.
④ Play chords as usual on the accompaniment keyboard keys. The moment you play a chord on the accompaniment keyboard keys, the auto-accompaniment pattern starts to play in the rhythm track.
⑤ Press the START/STOP button again to stop auto-accompaniment play.

- *This unit is capable of recognizing major, minor, dim, aug, sus4, 7th, m7, M7, m7-5, 7-5, 7sus4, add9, m add9, mM7, and dim7 chords. The following shows the fingerings of the recognized chords with a root of C. Note that the fingerings within parentheses can be omitted without changing the sound of the chord produced.*



■ Using the MUSICAL CONTROLLER buttons (INTRO, FILL-IN, ENDING button)

The 3 MUSICAL CONTROLLER buttons give you control over the rhythm and the accompaniment patterns. When the POWER/CHORD selector is in the FINGERED or ON position, you can control all of the accompaniment patterns. When it is in the OFF position, you can control the rhythm pattern only.

◆ **INTRO button**
This button inserts a light 1-measure introduction before starting the normal accompaniment pattern.

◆ **FILL-IN button**
When you press this button during play of an accompaniment, a 1- to 2-measure fill-in pattern is inserted.

◆ **ENDING button**
When you press this button in place of the START/STOP button to end the accompaniment play, a 2- to 3-measure ending pattern is inserted before accompaniment play is stopped.

■ Using the SYNCHRO button

Press this button and the indicator above this button lights to show that the unit is standing by waiting for you to play a note on the accompaniment keyboard (lower 1.5 octave, C through F). The selected rhythm and accompaniment pattern begin as soon as you press an accompaniment keyboard key. If the POWER/CHORD selector is set to FINGERED, the pattern begins as soon as you play a chord (more than three notes) on the accompaniment keyboard.

7 Troubleshooting

• *For any malfunction, always check battery condition first. (see page 6-7)*

Trouble	Possible Cause	Remedy
No sound, even if keys are pressed.	1. MAIN VOLUME turned down. 2. Headphones connected. 3. Auto power off has activated.	1. Turn up MAIN VOLUME. 2. Disconnect headphones. 3. Turn the POWER/CHORD selector off and then on again.
No rhythm.	MAIN and ACCOMP VOLUME turned down.	Turn up MAIN and ACCOMP VOLUME.
No accompaniment.	MAIN and ACCOMP VOLUME turned down.	Turn up MAIN and ACCOMP VOLUME.
Occasional interference.	Refrigerators, washing machines and similar electric appliances.	Use outlet as far away as possible from appliance thought to be the cause.
No sound when connected to external amplifier.	1. MAIN VOLUME turned down. 2. Defective connection cord.	1. Turn up MAIN VOLUME. 2. Replace connection cord.

8 Care of Your Keyboard

1. **Avoid heat, humidity or direct sunlight.**
   Do not overexpose the unit to direct sunlight, or place near an air conditioner, or in any extremely hot place.

2. **Take care not to drop the unit and avoid strong impact.**
   Strong impact may cause malfunctions. When carrying or transporting the unit, protect the keyboard and switches with soft cloth or other material.

3. **Keep the unit free of liquids, dust, etc.**
   Do not allow foreign matter to get between the keys, especially metallic objects such as hairpins, sewing needles or coins. Also, do not let the unit get wet.

4. **Never attempt to modify any parts of the unit.**
   The unit is a precision instrument, made of electronic parts. Any modification of, or tampering with inner parts may cause malfunction.

5. **Do not use lacquer, thinner or similar chemicals for cleaning.**
   Clean the keyboard with a soft cloth dampened in a weak solution of water and a neutral detergent. (Soak the cloth in the solution and squeeze until it is almost dry.)

9 Specifications

Model:	CT-395
Number of keys:	49
Polyphony:	12-note (Max.)
Preset tones:	110
Auto-rhythms:	56
Auto-accompaniment:	CASIO CHORD ON/FINGERED
Musical controller:	INTRO, FILL-IN, ENDING
Demonstration tune:	"The way that you love me"
Terminals:	AC adaptor jack (DC 9V), PHONES/OUTPUT jack; Output impedance: 60Ω Output voltage: 2V (RMS) MAX
Built-in speaker:	12 cm dia. (output: 2.2W)
Auto power off:	Approximately 6 minutes after the last operation
Power source:	3-way AC/DC power source;
• AC:	100, 117, 220, 240V (±10V), 50/60 Hz, with optional AD-5 AC adaptor
• DC:	6 AA-size (SUM-3/R6P manganese or AM-3/LR6 alkaline) dry batteries Battery life: approximately 1 hour (SUM-3/R6P), 4 hours (AM-3/LR6)
• Car battery:	Requires optional CA-5 car adaptor
Power consumption:	7.7W
Dimensions:	874(W) x 292(D) x 88(H)mm 34 7/16"(W) x 11 1/2"(D) x 3 7/16"(H)
Weight:	3.7 kg (8.2lbs) including batteries
Standard accessories:	6 "AA" size batteries, score stand

Designs and specifications are subject to change without notice.

GUIDELINES LAID DOWN BY FCC RULES FOR USE OF THE UNIT IN THE U.S.A. (not applicable to other areas).

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

..... reorient the receiving antenna
..... relocate the equipment with respect to the receiver
..... move the equipment away from the receiver
..... plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the US Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-00345-4.